PH.D. IN MARINE ECOSYSTEMS AND SOCIETY

Curriculum Requirements

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<td>MES 608</td>
<td>Biometrics in Marine Science</td>
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<tr>
<td>MES 715</td>
<td>Advanced Biometrics in Marine Science</td>
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<td>MES 830</td>
<td>Doctoral Dissertation</td>
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<td>RSM 700</td>
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<td>RSM 771</td>
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The MES Ph.D. degree requires 60 total credits.  

Core Courses

- MES 608: Biometrics in Marine Science (6 credits)
- MES 715: Advanced Biometrics in Marine Science

Electives

- MES 830: Doctoral Dissertation (21 credits)

Required Examinations

- Comprehensive Examination
- Qualifying Examination

Additional Requirements

- RSM 700: Research Ethics
- MES Seminar
- Proposal Defense
- Educational Training Program (TA)
- RSM 771: Educational Training 1
- RSM 772: Educational Training 2
- RSM 773: Educational Training 3

Total Credit Hours: 60

1. Minimum of 27 course credits and 12 dissertation credits.  
   - 6 course credits must be taken at the 700-level.

2. Course enrollment and scheduling is defined by the student and their Chair.
   - Students are affiliated with one or more of the MES tracks, and will be expected to adhere to all relevant academic requirements.

3. MES Ph.D. students must take a comprehensive exam at the end of their second semester in residence.  
   - MES Ph.D. students are expected to compose a full proposal, including a thorough literature review, clearly outlined objectives, a summary of the significance of their proposed project (including broader impacts, if relevant), a detailed research plan, and a budget. Following the written proposal vetting process by the committee, students are required to formally defend their proposal. The purpose of the proposal defense is to certify the readiness of the student to conduct dissertation research, as well as facilitate an open discussion regarding the objectives of the dissertation and the relevant experimental approach.

4. At the end of the second year in residence, all Ph.D. students must take a written qualifying exam, which emphasizes subject matter critical to the execution of the proposed dissertation research. The purpose of the qualifying examination is to demonstrate that MES doctoral students possess the requisite knowledge and expertise to be successful. The topic areas are established and agreed upon by the student, Chair, and the dissertation Committee at the proposal defense.  
   - MES Ph.D. students must host one seminar during their fourth semester at RSMAS and every year thereafter, with the exception of the semester in which they defend their dissertation.

5. In the event of a failure, a student may be reexamined once upon the recommendation of the Committee, in consultation with the MES Academic Committee. If approved, the reexamination must occur before the end of the subsequent semester.  
   - A supplemental oral qualifying examination may be required by the student’s Committee but cannot serve as a substitute for the written examination, which is a Graduate School requirement.

6. Students are required to attend all MES student seminars.  
   - In the event of a failure, a student may be reexamined once upon the recommendation of the Committee, in consultation with the MES Academic Committee. If approved, the reexamination must occur before the end of the subsequent semester.
   - A supplemental oral qualifying examination may be required by the student’s Committee but cannot serve as a substitute for the written examination, which is a Graduate School requirement.
Mission
The goal of the Marine Ecosystems and Society department is to educate, inspire, and train students to respond to the complex challenges associated with human utilization of and dependency upon vulnerable marine ecosystems. Our goal is to help our students better understand the emerging role they can play in shaping and ensuring the sustainability of marine resources, including strategic management efforts coupled with the highest standards of resource governance. Students will develop an interdisciplinary perspective through exposure to a wide breadth of intrinsically linked disciplines, including but not limited to fisheries ecosystem management, resource economics, mariculture, habitat restoration, climate change, anthropology, and social science. This facilitates their development as future leaders of the institutions and organizations charged with the responsibility of defining, utilizing, and conserving the marine environment and its resources.

Goals
To help our students better understand the emerging role they can play in shaping and ensuring the sustainability of marine resources, including strategic management efforts coupled with the highest standards of resource governance.

Student Learning Outcomes
• Students will demonstrate an advanced understanding of a range of marine related disciplines, specifically relevant to their research (proposed and executed).
• Students will demonstrate critical thinking skills through the development and execution of an original research plan, including the application of appropriate methodologies.
• Students will demonstrate the ability to communicate ideas effectively and professionally, both in writing and orally.